

March 16, 2015

Dear Superintendent,

A top priority for Governor Asa Hutchinson, the Arkansas Department of Education, and the Arkansas Department of Information Systems (DIS) is ensuring that the state's K-12 public schools have sufficient high-bandwidth broadband services. Although 58 percent of Arkansas districts are meeting the Federal Communications Commission (FCC) Internet access target of 100 Kbps/student, our aim is for **100 percent** of Arkansas schools to reach this level of connectivity.

With this in mind, DIS is pleased to inform you that an invitation for bid (IFB) was opened March 9, 2015, to provide pricing for broadband services. Once contracts are awarded, work will begin to convert schools to a new network that will accomplish the following:

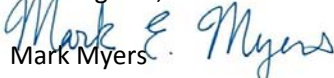
1. Provide district hub sites with Internet access as well as Metropolitan Area Network (MAN) services that can connect buildings within the district.
2. Establish an aggregated network that provides high-bandwidth and high-value to all of its K-12 users.
3. The state will assume the fiscal responsibility to provide adequate Internet access to each district hub via this network to ensure that digital learning bandwidth needs are met. District MANs will be the responsibility of the school district (See FAQs for more information).

This undertaking should result in the vast majority of the state's K-12 schools having sufficient Internet access by the completion of the 2015-2016 school year. By June 30, 2017, the overall implementation should be completed to 100 percent of the state's public schools.

Understandably, you and your technology coordinators will have numerous questions regarding how the IFB will impact existing contracts between districts and local service providers, E-rate, bandwidth, cost, equipment needs and other issues. Answers to many of your questions can be found in the FAQs accompanying this letter. Additionally, an email distribution list for technology coordinators has been created. As the IFB and ensuing contract negotiations play out, updates will be provided through this distribution list. Regional information sessions are also being planned to provide more details about the state network vision and to coordinate new services with district plans.

DIS will soon be contacting you and your technology coordinator to obtain the expiration date of any existing contracts. If your district's Internet access contract expires at the end of this funding year (summer 2015) and you do not currently have a solution for next year, please contact the DIS call center at 501.682.4357 or email dis.callcenter@arkansas.gov. The objective of DIS is to effectively meet the connectivity needs of school districts and the students they serve. We look forward to interfacing with district leaders in the coming weeks to provide more insights about the IFB.

Best Regards,


Mark Myers

Director, Department of Information Systems
Chief Technology Officer

Frequently Asked Questions

Questions related to the IFB and E-rate:

1. Can a district file for E-rate reimbursement for Internet only connections if DIS files for the reimbursement of the state provided connection to the district via existing contracts or new contracts as a result of the IFB?
 - a. DIS's understanding from the FCC is that in E-rate program year 2015-2016 only one type of Internet connection will be funded. The FCC understands that DIS, ADE and schools districts will need to work together to coordinate the migration from the current APSCN network and school district contracts to the improved APSCN network, which may take two years to accomplish, to eliminate any duplicate funding. For 2016-2017, the FCC expects coordination so that there is **no** filing duplication for Internet circuits serving district buildings.
2. How does the FCC interpretation for E-rate funding affect existing contracts? If a district is in a multi-year contract, is there any help the state can provide to discontinue the contract?
 - a. Contracts signed by school districts should include a clause stipulating that the contract is contingent upon funding. If there are issues with vendors and contracts, DIS will assist districts in communication with vendors regarding the feasibility of moving from old contracts to the new contract.
3. How much bandwidth will be provided by the state network, and how will new bandwidth allotment be determined?
 - a. Initially, the bandwidth paid for by ADE will be based on 100Kbps/user with a minimum of 100Mbps at the district hub which meets the SETDA/FCC recommendations for 2014-2015. The IFB provides vendor costs to increase to 1Mbps/user over the life of the bid award which is seven years. Also included are components to provide school district MANs which could be purchased by the districts. The minimum bandwidth bid for the MANs is 50Mbps.
4. When will the new bandwidth be implemented?
 - a. The network conversion is scheduled to begin July 2015. As much work as possible will be completed during the 2015-2016 year. The goal of ADE and DIS is to complete the implementation by July 2017.
5. Will the new bandwidth be affected by E-rate, and will districts be required to file anything for it?
 - a. No. The purchasing entity, which is DIS, is responsible for E-rate filing.
6. If districts purchased a BEE connection from DIS, will the district be able to continue that service or should it be purchased directly from the provider?
 - a. Yes, districts may keep the connection through DIS or purchase directly from a provider, but without E-rate funding. A better plan for district-served buildings might be to purchase a MAN through DIS (see question 3.)
7. If the district has fiber from provider A and the improved network uses a different provider, what will happen to the existing fiber?
 - a. The expectation is that the newly awarded provider will place fiber in the existing conduit to provide the WAN/Internet service provided by ADE.

8. If the district has multiple demarcation points, will the new network be constructed the same or will it be up to the district to implement a MAN?
 - a. The WAN service from ADE will terminate at the district hub. The MAN is the responsibility of the district and can be provided through the school district procurement process or from the contract award for SP-15-0068 for WANs, MANs and Internet (see question 3).
9. If the district has multiple sites currently communicating through the state network via a dynamic multipoint virtual private network (DMVPN) will the new network function the same?
 - a. The DMVPN will work until the district converts to a MAN which is the financial duty of the district.
10. Is there any way to continue the E-rate eligibility of a district's current bandwidth?
 - a. The FCC indicates that for the 2016-2017 school year and beyond, E-rate eligibility cannot be continued for more than one connection (see question 1).
11. Can a district purchase additional bandwidth from DIS that will be E-rate eligible? For example, if a district is eligible for 100mb funded by ADE and delivered by DIS, can the district purchase an additional 100 Mbps from DIS for a total of 200 Mbps, and receive E-rate discount or reimbursement?
 - a. Yes. It would be good if DIS has an idea of what the district might want so it can be shown on the Form 471, Item 21 for each program year.
12. Will the new connection be a dedicated fiber run from the aggregation point or what type of connection will the district have with the new network?
 - a. Ethernet connections will be used from the vendor aggregation points or on a point to point basis.
13. How will the newly expanded bandwidth be implemented with some districts lacking fiber direct to the campus?
 - a. The expectation is that the vendor will place fiber to the campus.
14. Will the state continue to provide a secondary class of bandwidth at a reduced rate, i.e., not business class but consumer class with no guaranteed up time or outage response time. Will the bandwidth be E-rate eligible?
 - a. Yes, but a second connection will not be E-rate eligible.
15. Will districts be required to purchase any extra equipment in order to receive new bandwidth?
 - a. There will be no extra equipment required for WANs. For MANs, districts can rent managed routers from DIS or the district may purchase and self-manage routers.
16. What options are available to districts regarding phone services since E-rate will no longer pay for that service?
 - a. In DIS's meeting with the FCC, it was stated that with reduced E-rate funding of traditional phone service, VoIP service transport can be provided over the single E-rate funded circuit with full funding for the bandwidth. The application itself will not be funded. For more information regarding VoIP, please email dis.callcenter@arkansas.gov or call 501.682.4357

Questions related to infrastructure:

1. Will districts be required to cover any last mile costs?
 - a. No. The service is provided through ADE and DIS.

2. What about costs involved in delivering required speeds to schools in remote areas i.e., Oark, Shirley, etc.?
 - a. We expect to see vendor responses covering WANs from 100Kbps/user to 1Mbps/user with a 100Mbps minimum, and MANs with a 50Mbps minimum for all district hub and served buildings.
3. What about bandwidth aggregation devices that were previously purchased in preparation for future bandwidth demands, for example a SL4000 with a \$15,000 purchase price?
 - a. If a district doesn't wish to continue additional bandwidth without E-rate reimbursements, the district can use the aggregation devices for other services or sell the device if it is deemed unnecessary.
4. Is there any restriction or law that denies schools from only using additional bandwidth and drop the state Internet connection since the FCC is considering load-balancing as duplicative service?
 - a. ADE and DIS will collaborate to find a workable solution for a single circuit that is E-rate eligible.
5. If the state network is required for hosted applications, is it possible to provide a VPN connection to servers to access the hosted services or open the Web-hosted applications to public Internet using SSL encryption?
 - a. A state network is approved as the best design, but DIS will work to accommodate the needs to include security, content filtering and VPN limitations. The district will likely have to bear the costs of the VPN solutions.
6. Will DIS assist districts with MAN connections? If not, are the current fiber leasing contracts still E-rate eligible?
 - a. The state will hopefully have better switched Ethernet rates for transport to construct MANs. DIS doesn't have dark fiber under contract. If districts are interested in switched Ethernet pricing please email dis.callcenter@arkansas.gov or call 501.628.4357 before the E-rate window closes.
7. If the cost for implementing/leasing MAN connections is not affordable, will DIS provide connections to every building that needs to be serviced?
 - a. MAN rates will hopefully be lower than the cost of a connection at each building. DIS is capable of providing connections to every building that needs to be serviced, but ADE will not pay for the connections.

Questions related to content filtering and firewalls:

1. Will DIS provide filtering for additional bandwidth, and will districts still be allowed local control of filtering?
 - a. Yes. DIS will provide filtering at the aggregation sites or in the cloud, based on the results of the bid, and districts will be allowed local control.
2. Will districts still need the local m86 or can districts return to the state m86 filtering?
 - a. DIS will provide content filtering at the state Internet points of presence (PoPs) or in the cloud, based on the results of the bid. The local M86 appliances will not be needed if the school receives all Internet connectivity through APSCN. As long as there are local Internet connections, the M86 appliance or a school provided content filter will be required by state code.
3. With more websites migrating to HTTPS, what appliances are being considered for the new bandwidth to effectively inspect encrypted traffic?
 - a. As options in the IFB, DIS requested pricing of Web-use only content filtering and secure Web gateway solutions.
4. Are there any next generation firewalls being considered instead of traditional firewalls on Cisco/Juniper appliances that can do more than just port based blocking?
 - a. Yes.